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UDO TOEPPERWEIN, of Bezar Co., Tex.,
Director of the National Bee-Keepers' Association.
(See page 628.)



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Editorial Comments

Too Abundant Rains is the cry of the agricultural papers in some parts. The bee-keeper, along with the farmer, will suffer from this, and producers of comb honey in one way that novices may not suspect. With continuous rains the atmosphere becomes saturated with moisture, and honey, having a strong affinity for moisture, behaves in this moisture-laden air much as it would in a damp cellar. The honey becomes thin in the cell, and increases so much in bulk that the air-space next the capping is filled with the liquid, giving the comb a water-soaked appearance. While nothing may be done to effect a cure, something may be done in the way of prevention, and even in warm weather it may pay to use fire to heat up the honey-room to the drying point.

Standard Weight of Extracted Honey.—At present there is no such standard. Is it desirable? Is it feasible? Good honey contains somewhere in the neighborhood of one-sixth of its weight of water; in a moisture-laden atmosphere it may attract to itself so much moisture as to be nearly half water. Taking these two extremes, there ought to be a material difference in price; is there? A grocer who has bought some of the thin honey at a certain price, when approached by one who has a fine article of extracted honey, will, in many cases, expect to buy it at the same price. In too many cases honey is honey, without regard to color, flavor, or body.

Suppose we take a case not extreme: A grocer buys honey that is a third water at 8 cents a pound, and afterwards buys some only a sixth water; if 8 cents is a fair price for the former, what is an equitable price for the latter? If we throw out the water as of no value, the 8 cents was paid for two-thirds of a pound of solid honey, if we may use that expression. That would make a pound of solid honey worth 12 cents. In the honey with one-sixth water there is five-sixths of a pound of solid honey; at 12 cents a pound it is worth 10 cents. So, if the one honey is worth 8 cents a pound, the other is worth 10 cents. That is on the supposition that one honey is just as good as the other except as to the matter of density. As a matter of fact it is not.

It is very clear that there is no fairness in having these two honeys sell at the same price; so it would seem desirable that there should be some standard by which the price could be established. Is it feasible to adopt and to use such a standard? That is another question.

As to the Queen and Her Treatment.—On page 532, some questions were asked of Arthur C. Miller with regard to some of the relations of queen and workers. Answers were promptly received, and, with apologies to Mr. Miller for delay, they are here given:

1. **CARESSING.**—I interpret it as curiosity, and searching for food. I also surmise the odor of a pregnant female, or, in the case of a queen-bee, whose structure is peculiar, we may have an odor comparable to that of animals "in heat," may be accountable for some of the attention the queen receives. Certainly, virgin queens, "exhausted" queens, and queens not laying, attract far less attention than does a queen in the full tide of laying.

"Grooming" is the only thing approaching "respect," and I should be pleased for an explanation of its purpose.

2. **TONGUE POKED FROM CELLS.**—I don't know what for. It may be for food, but I've never seen a queen get any then. And—

3. **HOW DOES A QUEEN ASK FOR FOOD?**—With her antennae. That is to say, they are always active when she is seeking food, and often a deal of "talk" takes place between the queen and the bee from which she is soon to obtain food.

If you will watch a queen-cell you will seldom see the antennae put through the cut except for an instant now and then. Cut them from a bee of any kind and note the result. Immediately the poor creature seems to become deaf, dumb and blind. Lubbock made extensive experiments in that line.

The management of queens in nurseries, in introducing, theories of stimulating, etc., are all based on the assumption that bees offer food, "holding out their tongues to the queen, offering her food." I believe the individual bees to be utterly selfish. I think we must (for many purposes) regard the colony merely as an aggregation of individuals, each possessing many of the characteristics of "solitary" bees, which, I believe, is considered the original type from which the honey-bee sprang.

ARTHUR C. MILLER.

If observation shows that bees never offer food with the tongue, and that food is never thus given, the food being given by the mouth and received by the tongue, it is well to be exact in our knowledge on that point, even at the expense of giving up cherished traditions. Whether all will be ready to accept the view that workers are without special affection for their reigning sovereign—the term "reigning sovereign" being used in a highly figurative sense as a sort of traditional habit—remains to be seen. So long as Mr. Miller is himself uncertain as to the purpose of "grooming," while admitting its approach to "respect," he may expect that some will believe it is respect; and the "admiring circle" so frequently seen formed about a queen, and the wall of the bees at her loss, will be offered as proofs not only of respect but affection.

In pulling up weeds in a flower-bed one is in danger of pulling up flowers at the same time. If, while the weeds are being pulled up, we find the roots of some of our flowers disturbed, let us thank the weeder for pulling up the weeds.

May Supplant Sugar-Beet.—Under this heading appears the following dispatch from Washington to the Chicago Daily News:

The Agricultural Department is inquiring into the statement of Consul General Richard Guenther, that a new plant has been discovered in South America, which promises to supplant the sugar-cane and the sugar-beet. Scientifically the plant is known as the *Eupatorium rebandium*, and it contains a large amount of saccharine matter properties, which are easy to extract.

According to Mr. Guenther, a lump the size of a liver-pill will do the business in a cup of coffee, as the product made from the plant is from 20 to 30 times sweeter than cane or beet sugar. It is said to be easily cultivated in countries having climatic conditions similar to those of the southern portion of the United States.

Bee-keepers are not specially anxious as to how sugar-beet men may view this matter, but any new development in "sweets" can hardly fail to suggest the question, "What effect will it have on the honey market?"

The probability is that nothing will come of it, for at present it is only in the rumor stage, but suppose that what Mr. Guenther is reported to have said should turn out to be true, there is a possibility that the price of sugar may be materially reduced, in which case what about the price of honey?

It is not at all certain that cutting the price of sugar in two would have any material effect on the price of honey—certainly the price of honey would not be cut in two as a consequence. With the price of sugar and honey close together there is direct competition, for, to a large extent, one can take the place of the other as a mere sweetener.

When, however, a man pays for a section of honey an amount that would purchase three pounds of sugar, the two can hardly be said to be in competition, and the extra price paid for the honey is paid for the extra qualities it possesses, and with which sugar can in no way compete. A drop in the price of sugar to 3 cents a pound would not induce him to take the sugar in place of the honey any more than when sugar was 6 cents. So we need not worry whether or not *Eupatorium rebaudium* materializes as a formidable competitor of the sugar-beet.

Sketches of Beedomites

UDO TOEPPERWEIN.

Mr. Udo Toepperwein, whose portrait graces our first page this week, is a resident of Texas. He began the bee-business when a little boy, and decided, years before he was of age, that he would make bee-keeping a life study. He gradually worked his way up, and is now manager of the Texas branch of one of the largest bee-supply manufacturers in the world, and also has the exclusive sale in that State of honey-cans made by a large firm.

Mr. Toepperwein also has an extensive business in buying whole crops of honey from bee-keepers in and around the locality where he lives, and has himself apiaries at different places near, besides an apiary of 40 colonies right in the city.

Mr. T. was married only about a year ago, is a bright young business man, only 25 years of age, and seems to be able to take care of almost any amount of business with good judgment. Last spring he was appointed a member of the Board of Directors of the National Bee-Keepers' Association, to take the place of Mr. A. I. Root, who had recently resigned.

We have met Mr. Toepperwein on several occasions, and believe he is representative of the best in beedom in the State of Texas. He is quite a "convention trotter," though he seldom takes any part in discussions unless called out, when he speaks with a freedom and intelligence that evidently are born of experience. We believe he will prove an honor to Texas and a credit to himself as a member of the Board of Directors of the National Association.

Miscellaneous Items

ON TO LOS ANGELES!—Having arrived at Williams again, about noon on Monday, Aug. 17, after visiting the Grand Canyon, our car was attached to the through train on the main line of the Santa Fe, bound for Los Angeles. It was a delightful ride for many miles, surrounded with mountains whose sides were covered with pines, and along the railroad acres of the beautiful cleome, or Rocky Mountain bee-plant, nodding in the breezes.

But towards evening we began to get into the New Mexico desert, and how hot it was! Nothing but heated sand all around us, and hot sunshine above us, with a suffocating breeze that one could imagine came from the lower regions.

We arrived at Needles about 9 p.m. This is called the hottest place along the line. We could easily believe it. The temperature must have been about 110 degrees above zero. It seemed to us the hottest night we ever passed through—and yet not as terrible as we expected from the way we had been previously warned.

At Needles, Indian squaws and maidens were offering long strings of beads of various colors, which were very pretty indeed. And they made many sales to the ladies of our train. The prettiest were \$1.00 per string, though in other places \$1.75 or \$2.00 are the prices asked for the same thing. They are worn by ladies as girdles, or around the neck, and are indeed quite attractive.

We omitted to say that at Williams, the Santa Fe railroad company put on our train a man known as a "Tourist Conductor." At least that was what it said on his cap. His name was Max Jenney. (Prob-

ably he has that same name yet, as he was a married man at the time!) Now, we have met men that we thought could talk—men that some would say had a double dose of "the gift of the gab." But here was a man that simply was "all talk." Why, he knew everything about everything that anybody possibly wanted to ask about California or anything else. He knew the flowers, the fruits, the mountains, the climate—well, we wouldn't have space to mention them all. He was good-natured, too. If the Santa Fe ever pays any of its employees for genuine talking ability, Max Jenney ought to get a big salary. He earns it. In fact, the State of California ought to pay him, too. If everybody he meets doesn't stay in California after once inside the State, it won't be Max Jenney's fault. We just got away from him as fast as possible. Why, he'd make you forget the old home and any business there (if you left any), and have you believe California is really the vestibule to Heaven.

Max Jenney!—the car of bee-keepers won't forget him soon. He's a good one. He's an actor, an enterprising story-teller—true (?) stories, of course—a "hale fellow, well met"—a "Tourist Conductor!" Ah, "Max," you're a dandy. Long may you live to "conduct" the "tourists" into your land of bloom, of sunshine, of climate—of heat and dust—gold, and the more common, earthy kind of dust.

The morning of Tuesday, Aug. 18, we began to get into the San Bernardino Mountains. We were at last in California! Could it be possible? Personally, we had longed, for years, to set eyes on that far-away land of gold. Finally, we were "right in it." There were the orange and lemon groves, the eucalyptus and pepper trees. Yes, and the yucca and cacti. But no grass! Oh, how dry and barren the ground looked! And everything covered with dust.

We reached Pasadena, which is some 10 miles this side of Los Angeles, about 9 a.m. Having relatives there, we stopped off until towards evening. We were at once driven in a carriage to one of the many lovely homes to be found there, and the very first thing we did was to take a good bath. Oh, wasn't it fine, after that long, dusty ride of nearly a week? How blessed it was to be clean once more! If we could only then have taken a long nap, we would have felt more natural again. But there was no time for that. We must soon take the street-car for Los Angeles, in order to be on hand for the reception to be tendered by the California bee-keepers in the evening.

Oh, yes, we forgot to say that as we stepped off the train at Pasadena who should we see but Geo. W. Brodbeck? He had come out from Los Angeles to meet the car-load of bee-keepers and ride in with them. We had never met Mr. Brodbeck before, though we had had a pleasant correspondence acquaintance with him for years. We are glad that so good a man is to succeed us in the secretaryship of the National Association next January. Mr. Brodbeck is a man that not only California bee-keepers, but all the rest in the whole country, may well be proud of.

We arrived at the Natick House about 6 p.m., and after supper went over to Blanchard's Hall, on Broadway, where the sessions of the convention were to be held. At the appointed hour the room was well filled, and "then the music began." The orchestra of the Sunday-school of the First M. E. Church of Los Angeles was present, and the music they rendered was surely inspiring. The superintendent of the school was seated near the rear of the room, and evidently enjoyed the program. By the way, this superintendent was none other than Dr. H. W. Brodbeck, a brother of Geo. W., and one of the most pushing (and doubtless "pulling," as well) dentists on the Pacific Coast. We will have more to say of Dr. Brodbeck later on.

As has been already announced in these columns, the evening session was presided over by Pres. T. O. Andrews, of the California Association. It was a very enjoyable evening. Everybody seemed happy, even if it was too awfully hot for comfort. It was an unusually heated spell for that locality—at least that's what those Californians said, and, of course, we had to believe them, as they ought to know. We didn't. All we knew was that if that was a fair sample of the glorious California climate we have heard so much about, we could find the same thing without going over 2000 miles away from home.

But after Prof. Cook and some others had given us all such a royal welcome, and after we had met a number of the extensive bee-keepers—extensive both as to bees and good-nature—that were present, we felt quite at home, and decided that we were going to have a good convention. What with Cook, and Harbison, and Corey, and Brodbeck, and Mercer, and Mellen, and Mendleson, and McIntyre,

and—and—well, so many other genial Californians, who couldn't have had a good and profitable time for a few days?

But as to what was done and said during the convention, that will be found in the regular published report which is now appearing in these columns. In some ways it was the greatest convention of bee-keepers ever held on this continent, or in the world. We were glad to be permitted to be present—to be one of that goodly company. We will never forget it. We will look back to it for years to come, and only wish that we could have remained several weeks after the meeting, instead of only two or three days. But a weekly paper requires constant attention, and lots of "copy," so it was necessary for us to hasten home instead of visiting, as we would so much have preferred to do. The next time we go out there, we hope to be able to stay a month or so.

Some after-convention experiences will be reserved for our next week's installment of these notes.

Convention Proceedings

THE LOS ANGELES CONVENTION.

Report of the Proceedings of the 34th Annual Meeting of the National Bee-Keepers' Association, Held at Los Angeles, Calif., Aug. 18, 19 and 20, 1903.

(Continued from page 615.)

CO-OPERATIVE MARKETING.

Prof. Cook—If any of you would like to ask any questions, I am sure Mr. Reed will be glad to answer them.

Dr. Miller—It is now 10 minutes of 11; some of us have come a long way, and we have not struck any bee-talk. We don't know about oranges; we don't care about oranges, but I want to say to you that I feel like giving a very hearty vote of thanks to the citrus producers in general, and to Prof. Cook and Mr. Reed for talking to us about oranges. They have blazed the way that we ought to go. If we heard nothing else in this convention, and could go away feeling that something was going to be done as they have done, our coming would not have been in vain. I want to move a standing vote of thanks to Mr. Reed.

Motion carried.

Dr. Miller—I think there is a string of questions about that long [indicating by extended arms] that we would like to ask him, but I believe we are ignorant; we do not know what we want, and if there is anything in particular—I am all at sea—I do not know what is the right thing. If any of you know more than I do, and can ask questions, go ahead. I feel there is a great deal to be said on this subject.

Dr. D. W. Edward—At a number of meetings that I have had the pleasure and privilege of attending of the bee-keepers, I have heard this matter thoroughly discussed, and I respond heartily to the vote of thanks. However, this is the National Bee-Keepers' Association, not a citrus fruit convention. I am interested in both in a financial way, and I would say, that so far as my interest in the honey is concerned, the only interest I feel in this subject is in a lecture on the orange and lemon blossoms. It seems to me we are ignoring the fact that whatever this is, it has existed for years, and there is already an organization which is doing business to-day successfully operated by honey-producers exactly on the line that has been suggested, and which has been entirely ignored, so far as this discussion has gone. I would like to hear from these men of their organization, so that they are all converted to the idea of co-operation, or organization to carry out the same ideas advanced by Prof. Cook. And if that has been the beginning of the citrus fruit growers' association, why go back and rehash all that—why not go back to the bee-question?

Prof. Cook—I do not agree with the gentleman one bit. We have formed here a honey association, but it is just started. We want to form on something akin to that that has succeeded. In all essential respects they are just the same—it is the marketing of a product produced by people.

If these honey exchanges had been of long standing, we would not say a word about oranges. We have an organization that is in California. This is the United States! We want to touch questions that affect the whole country. One year ago this came up the first time in the National Association. It is a new thing, and we have nothing to refer to in bee-interests, and in this fruit exchange we have an example, and that is why I wanted Mr. Reed to come here this morning. These bee-men have a year or two at the most; they have just started. Our friend, Mr. Brown, went to Denver, last year, and stirred up the whole country. But it is very little we have done—hardly anything yet.

T. O. Andrews—Has your co-operation, the Citrus Fruit Exchange, worked much of a revolution in the freight rates? That is one of our difficulties.

Mr. Reed—No, we have not. We are practically owned by one railroad. We have done a good many things though that have aided and helped us at times in the rate business. There was one year we asked for a special rate to fight the foreign oranges. They gave it to us for four months, and that was the first time citrus oranges had been introduced to any extent. We went into the New York market and drove the foreign oranges out of it. Then the lemons. Without our fruit exchange we could never have accomplished what we did. I believe the citrus growers owe to the organization of the Southern California Fruit Exchange more than to anybody or all else together, the fact that they organized and could fight for a tariff and get it.

E. T. Abbott—I do not believe in anything he says—that is, in his theory. I want to talk about it later. I want to say, however, that in the five days travel it took me to get here, I have only traveled in a portion of the United States. I live in the center of the United States. The United States is a little portion of the territory covered by the territory of this National Association. This Association does not belong to the United States. It belongs to Canada, also. And to use illustrations by what has been done in a little patch of country that is not as big as a little neck of New York, is all fallacious.

F. E. Brown—I had not expected to say anything at this time; I have made no preparations whatever, but I am to have the opportunity of saying a few words along these lines. I am sure, as has been stated by Mr. Abbott, that this is a great question. It is one that has great magnitude. It reaches over a large space of territory, but at the same time there is not so much more business transacted by the honey-men than there is, perhaps, by the Fruit Exchange. But it is also true that the citrus fruit industry is centered in one locality, so to speak, while ours is spread out; but I do not see that this matters so much. I have been much interested this morning by the talk of Mr. Reed, because experience is a great teacher, and if we can profit by this experience, it will save us money; it will save us time, and a great deal of time, and a great deal of annoyance.

Now, I say to this assembly, we are inclined to believe that because we are producers of honey we are capable of transacting and carrying on our own business, regardless of the fruit-growers. This is a pride that we have of ourselves. This is all right. I am glad we have ambition along these lines. And while the fruit-man has organized, and while his organization has been a success, it has not been due to previous experience, as Mr. Reed has told us. But he said, "We have men of brains," and, ladies and gentlemen, we have men of brains in our ranks.

Now, while our honey interests are situated in localities from California to Maine, it is necessary for us to organize in localities. We believe this is so. Prof. Cook believes this is so, and he is writing along these lines. We are organized, and we will organize in localities. We will organize and transact business in localities. Then we will simply take hold of hands and march along to success. Is not that reasonable? Is not that so? Look at the association in Colorado. They are a strong organization that any bee-man should be proud of.

Look in other localities—Central California I should not pass, because I am from Central California. I have worked in that association from its beginning, and we have made a record that I am proud of, and I am glad to say it to my brethren here to-day. Look at Southern California—some 200 to 300 miles away from Central California. They have made a beginning that we bee-keepers of the Pacific Coast should be very proud of. It is a good thing. They are doing well. Look at their name—The California National Honey-Producers' Association!

Dr. Miller made this remark: "What is that word 'National' attached to the Honey-Producers' Association

of California?" The explanation given was that in California they do things in big ways. The State is a world of its own. But that word "National" applied to the California Honey-Producers' Association means more than that. It is a handle to hold onto, it is a coupling to couple onto. When you start your association, start an association having a place by which it can be attached—coupled onto other associations, and we can be coupled together as one train.

I am not going to comment upon what Mr. Reed has said about this orange growers' association. They have worked a good work; they have succeeded splendidly. By local organization, local associations all united for a definite purpose and working together, they have wrought this result. There are matters of detail that we may incorporate into our association or not, as we please, but the thing is to organize, and have a place by which we expect to become a part of the National organization. The California National Honey-Producers' Association we expect will reach out into Arizona. Here is Mr. Ivy, he will have an association; and then we expect to reach out over to Mr. Harris, in Colorado, and I am sure he will be glad to couple on. Then there is Texas doing a noble work. We will go across the continent, spread out, and then we will take in all the honey-producers of this great land, but we can not stop there. We must reach out and take in Cuba. The Cuban question is one that we are "up against," and we must have that in our association. It does not matter about distance. Distance is nothing to-day with our rapid transportation and rapid communication. So, when we have these local organizations, and then means by which we can take care of the goods, there is no impossibility about it—not at all!

Now, regarding the selling agency, just a word. Any local associations to-day have to place their goods upon the market somewhere. They do not keep them. Now, my own experience lately: I have a crop of honey in Southern California to sell. We are holding it for better prices. We expect this, for the people around here who have not organized are selling to the commission men, and we, who have organized, will reap the benefit of the market. You, who are not organized, will see later on what you are losing, as you have in times past. But we have to market our honey. We have to sell it somewhere. We have a broker in Chicago, Boston, or New York. These brokers receive a commission for handling our goods. Now, the orange people may have salesmen, and their expenses will be about the same as that of the broker. What we want is a central selling agency that may direct the selling of these goods, and then a man in New York, who has been accustomed to sending to him, can simply place his order with the central selling agency for a car-load of Central California honey. We can deal with the selling agency, and then it is safe. We can not always tell what our brokers will do, but when we have our selling agency, there will be confidence established, so that any man will be willing to trust his goods to that selling agency.

Prof. Cook—I am glad that Mr. Abbott does disagree with me, because there wouldn't be any fun if we all saw these things alike. You have heard the old story: Tom and Bill both enlisted in the army. Tom said, "I always did like war; I was a single man, and so I enlisted." Bill said, "I was a married man, and I like peace, and so I enlisted!" But we want to work together, and start right out. We have to convert the whole country—not like California and Colorado. We want to take in the whole country, and can do it. Another story: Two men leaned over the wharf to catch the fish. When the fish began to pull on the lines, one said, "I can't swim; I am drowning!" The other said, "I can't swim, and I am drowning, too; but I am not making such a blamed fuss about it." I hope you will all go home and make such a fuss that the whole country will hear it, and that we will have such an organization of the whole country as you have had in Colorado so successfully for the past three years, and such as the Citrus Fruit Exchange has had so successfully in Southern California for the past six years. This is going to be a great work, but I think the time of the real fun in life is getting under a big load and raising it—under a great problem and then make it move.

Mr. Abbott—This discussion seems to be drifting in the way of unionism. The unions always get things in their own hands, and then it means, "Go the way they do, or die!" This morning we seem to have been served notice that the other side can not be discussed. I want to say that I am first, last, and all the time opposed to turning over this National Bee-Keepers' Association to any kind of an association that simply means the dollar. The world is all striped over with the dollar-mark. If there is not a dollar-

mark to measure the value of a thing, it has no value! I believe in keeping the National Association free from the dollar-mark. I do not believe in sending it out on a mission of money. It has a better mission in the world, and I hope to see it fulfill that mission. If you purpose to put it on a basis of commerce, you will simply go to the wall.

A few years ago, Mr. Root said I helped to make the National Association. At the first meeting we ever had this question was up, and it has been talked more or less ever since, that we would have a great Central Honey Exchange, and sell our honey at our price. All the citrus fruit is produced in a little space in California. You have about 50 percent of the citrus fruit-growers in this Citrus Fruit Exchange. When can you get 50 percent of the honey-producers into such an exchange? You can not get 50 percent of them into an organization in a thousand years! Then you and I will be dead and gone, and will not care so much for the Almighty Dollar as we do now.

This is a day when we try to minify the individual—a day of socialism, when men have nothing to do but theorize. The atmosphere is charged with it all through from Missouri up to where the waves surge against your shores. But there are high moral principles that lived before these things were, and they will live after these things are gone, and the only thing I have to suggest is that all these "isms" are self-destructive. If they were not, I believe all these combinations would force upon us the bloodiest war that ever has been known. We have had some of these combinations, which have called out every man in the town belonging to their union, simply because one man claimed the right to support his wife and little babies. What did the walking delegate say? "We have killed other towns, and we can kill this!" This is the other side of the question, and it is a serious side. It means danger to the people of this country, and it means serious danger. It is not a question of efficiency; it is not a question of ability; it is simply a question of compelling men to belong to the union whether inferior laborers or not, and when I employ a man to set up my paper, I dare not ask him whether he is a good printer or not. The only question is, "Do you belong to the union?" This is the spirit you are falling in with, and when you have gotten through you are just where you commenced. I do not want to disagree with all of you, but I want to say, Be careful; the Almighty Dollar is not all there is in it. We do not want a commercial organization, bound by commercial rules, said to be governed by honest men. Do you know, dishonest men sometimes get into strange places? Did you read about the minister that ran away with the missionary money—\$70,000—and went away to die in disrepute? They thought honest men were handling that money. All of these things are to be considered. This is the other side of it, and I just want to leave this word of warning: When you turn the National Bee-Keepers' Association over to an organization to sell honey, you will simply put it where it will lose its power in the world.

Jas. U. Harris—I see Mr. Abbott has to be "shown." I feel astounded to see that any man would come on the floor of this convention and try to throw anything in the way of the horny hand of toil. Everything that is brought forward in the way of wealth is done by the laboring man. The capitalist of this country is organized. You may have bad, you may have good, in all these organizations. You have bad, and you have good in your churches. But, for heaven's sake, when we go to work like the honey-producers of Colorado, and the fruit-producers of California, let each and every man put his shoulder to the wheel and help along. The time has come when the farmer, the merchant, the bee-man, and all others have to protect their babies and their homes on the lines that have been argued here this morning. Let me say that we are not going to turn this institution into any financial institution at all. The honey-producers' association of the United States will be distinct and separate from this organization. But it is a stepping-stone to help every person who engages in this industry to get what is right, and what is just for his product.

C. P. Dadant—I do not believe, when we organize, that it is possible to separate ourselves from the Almighty Dollar? Organization, association, is the order of mankind. There are very few not organized in some way or other. I belong to the National Bee-Keepers' Association. Most men belong to some secret association, some life insurance company. When a man insures his life, he insures it so his wife and little ones will have something when he dies. Is that wrong? But that is an organization with the Almighty Dollar in view. But I do not believe we can get our association in that shape yet.

Dr. Miller—I wrote a letter to my wife this morning.

That is nothing; I have written 15 others to her since I left home. And I put it in a box down here. By and by a man will come around and he will pick out that letter, and he will take it over to a big building that is here. He will put it in there, and he will put it in a certain place, and it will be taken on the cars and go from one man to another and be taken about 2000 miles and put it into a little office in the town of Marengo. I live in the country, and there will be a man there who will take that letter and put it in the box out where I live, and somebody will take it out of the box at my house. And what do you suppose I paid for that? I paid just 2 cents! [Laughter.] And that is co-operation!

Frank Benton—I wish to say that the foundation of this country is on co-operative principles. We are all together. It is a co-operative government, in our post-office facilities, and in all departments of the government. And why should we stand out as an organization? We are "up against" the railroad combine, the tin combine, and even the boxes that hold our honey. That being the case, is it not necessary for us to get together and buy in large quantities, and buy these things at the minimum cost? It does not necessarily increase the cost to the man who eats it. We minimize the cost of production all the way around, and sell the honey to the individual at the same price he is paying to-day. I believe it would be possible so to minimize the cost of producing, packing, and all expenses, as to realize more than three times the actual profit that we are making at the present time. Why should we not co-operate?

J. K. Williamson—There is one matter of co-operation we should have the benefit of right here at the convention. We are entitled to reduced railroad rates, and if each and every one had gotten a receipt for his ticket, what we could have saved in our railroad fare would almost have paid the expenses of the convention. And we want to impress upon all to take a receipt for their railroad tickets and bring them here. If we have over 50 members present, we are entitled to reduced rates.

A. F. Morley—I have given this matter a good deal of thought for a few years, from a remark I heard a speaker make, and I believe it is a fact, that we never get around in any shape only as we drift with the tide. And when one little company of five or six go to shift the other way, they will simply miss the track.

Albert B. Mellen—I agree heartily with Dr. Miller. I agree heartily with Mr. Abbott. Now, that is queer, isn't it? We are working to raise the price of honey to meet the raise in the price of everything else. That is exactly what the stock-brokers are doing in Wall Street. Up, up, up! Bound to fall! Dr. Miller says he can send a letter from here to Illinois for 2 cents. He can do more than that. If they can not find the party to deliver it to, they will bring it back and chase him around for two years to return it to him, and it will only cost him the original 2 cents. The fare from New York to San Francisco is about \$100. It has been demonstrated that passengers can be carried for \$2.50. Now, instead of working the price up, let us work the price down. When you get the price of honey too high, very few people will buy it—can not afford it. If we could sell honey at 5 cents a pound, and could ride from Los Angeles to New York for \$2.50, we would be making more money than we do now. It is not the amount of money that we get, but the amount we get for our money that tells the story. They are raising the price of everything, up, up, up. Now, if we are going to co-operate, let us be co-operated. I do not purpose to run this thing into politics, but let us run it into universal co-operation.

Pres. Hutchinson—I will announce the committees, and then we will take a recess:

ON AMENDMENTS—J. U. Harris, W. F. Marks, George W. Brodbeck, Udo Toepperwein, C. P. Dadant.

ON MEMORIALS—Dr. C. C. Miller, Prof. A. J. Cook, N. Levering, and M. H. Mendleson.

ON RESOLUTIONS—J. M. Hambaugh, A. I. Root, and H. H. Hyde.

ON PUBLICITY—Emerson T. Abbott, L. E. Mercer, and J. F. McIntyre.

An adjournment was then taken until 2 p.m.

(Continued next week.)

Contributed Articles

Bulk Comb Honey—Eucalyptus Trees.

BY PROF. A. J. COOK.

MR. P. G. CARTTER, a subscriber to the American Bee Journal from California, keeps a few colonies of bees, and is also a dealer in honey. He asks me to express myself, through the Bee Journal, on two propositions. He sells much bulk comb honey. He puts this in pails and fills the pails with good extracted honey. He finds a ready sale at a good price. He asks why not put most of our comb honey in this way on the market, in lieu of the common sections. He also wishes to know if it is practicable, and, if so, desirable, to place nice glass jars right on the hives and have the honey stored in them all ready for market.

Years ago it was quite common to sell bulk honey in the fashion suggested above. The fact that such sales are now very rare, and very rarely attempted, shows that in the evolution of our present methods this one has become nearly extinct, while the sections have come to the front everywhere. This, alone, would prove that for the average and general market the sections are preferable. The reason for this is not far to seek. There is something exquisite in the neat, white sections as they are seen in the retail grocery. Their very looks are a bid for purchase. In the dining-room a dextrous cut removes them, and we have the immaculate, irresistible comb honey of just the right size right on the china, with no daub or untidiness, all ready for the most fastidious guest. Not so the bulk comb honey. It is taken from the pail all smeared with liquid honey that has surrounded it, which would not please any housewife, not to speak of her guests. More, it is not trim and neat in form, and certainly could never hope to compete on any table, or with any lover of such sweets, with the exquisite comb, clean and trim, just as it comes from the section.

Again, this bulk comb honey, with its old-time retainer, has an unsavory history. I think it originated with the Perrines, in Chicago. They put it in pails or jars and surrounded it, not with pure extracted honey, as our friend suggests, but with honey heavily adulterated with glucose. The Thurburs, of New York, who afterwards sold much of this kind of honey, defended the practice in the fact that such adulterated honey would not candy or granulate, and so would be preferred in the market, while the chunk of comb would push the fraud on the market and table. They did not say, however, that the far cheaper glucose sold as honey, and for the price of honey, secured a profit, which, though illicit, was no light weight as an argument in favor of the practice. A loud complaint was uttered, and the Thurburs consented to the abandonment of the practice. I fear that extracted honey is still largely adulterated with glucose, yet I think there is very little, if any, sold in this fashion. If it were, I should raise my pen and voice hard and loud against it. I am sure that two good counts can be made against such frauds—counts other than that adulteration is a fraud, and so the Devil's own business:

First, honey adulteration with glucose is not wholesome, else why is it fatal as a winter food for bees? and, why do bees refuse to take it, if they can get any other sweet? Although high chemical authority has defended the wholesome character of glucose as a food, the bees themselves refute the statement.

Secondly, the glucose, either of honey or candy adulteration, leaves a peculiar, brassy taste in the mouth, which will soon create a distaste for such honey, and thus a double thrust at the honest bee-keeper; it requires him to compete with an unwholesome, cheapened product, and with a product that is sure to "bear" his market. Let us all not only denounce this and all adulteration, but let us raise our most emphatic protest against it every time and place, and on every occasion. Let us continue to urge with renewed vigor until we have the best and wisest *National pure food law*.

As this form of honey adulteration is no longer practiced, so far as I know, I see no reason why any may not sell bulk comb honey in this form if their market warrants or suggests it, yet I feel sure that they must, perforce, keep the incomparable section-honey out of sight, or their sales will not be very heavy. Hard, manual labor, and the

Amerikanische Bienenzucht, by Hans Buschbauer, is a bee-keeper's handbook of 138 pages, which is just what our German friends will want. It is fully illustrated, and neatly bound in cloth. Price, postpaid, \$1.00; or with the American Bee Journal one year—both for \$1.75. Address all orders to this office.

keen appetite of youth, especially when coupled with a scant purse, may furnish a market for a limited supply.

BEES STORING IN GLASS JARS.

There are several reasons why it will never pay to secure our surplus in glass jars by the bees. The jars are too costly; the bees are not as ready to enter and store in them; and the stain on the glass as it is made a foot-path for bee-travel, would make the jars uninviting. Cleaning would be far too difficult and laborious, in the nature of the case, to be practicable. For exhibition purpose at fair or exposition this may pay, for then we can afford the labor to make it neat and attractive, but as a general proposition it will never find favor, I am sure.

EUCALYPTUS.

Mr. H., of Corona, California, asks what eucalyptus I would suggest for honey. I am glad to answer this, as this beautiful tree should be planted far more extensively in our State than it is. There are fine blocks of it scattered here and there all about. There should be groves of it thickly set all about us, and the streets should be lined everywhere by these fine trees. Beauty, comfort and climatic influence all loudly favor such tree-planting. The blossoms are showy, persist for weeks, and can be had, by careful selection in every month of the year, and are all attractive to bees. I would suggest *Eucalyptus corynocalyx*. This grows rapidly, furnishes fine timber, and is known as the sugar-gum. *E. rostrata*, or red-gum, is very useful for timber. *E. Sideroxylon* is very handsome, graceful, has exquisite foliage, and may well be planted. This and *E. ficifolia* have beautiful-colored blossoms. *E. crebra*, *E. diversicolor*, *E. polyanthemos*, and *E. Gunni*, all are worthy a trial.

E. diversicolor, *E. rudis*, and *E. Gunni* stand much cold, the first enduring a temperature down to 8 degrees F., the others to 18 degrees F. *E. citrodora* is a fine honey-tree, one of the very best, and has a pleasant fragrance, but it will not stand much of a freeze, especially when young. We have fine trees at Claremont, but they killed down at first. They seem hardy now, for they stood a freeze down to 23 degrees F. last winter. I hope many will plant these trees.

Los Angeles Co., Calif., Aug. 14.

Our Bee-Keeping Sisters

Conducted by EMMA M. WILSON, Marengo, Ill.

Interesting Experiences of a Sister.

You want the experience of some of the sister bee-keepers. The last three days I have had considerable, but not pleasant. One of the tenants on one of my farms was taking surplus cases from his hives, and wanted to take part of mine off. Now I, for myself, like to take the honey from the hives late in the fall; it is cured better. And now I want to ask some questions:

1. We found the hive-body full of honey, and the queen gone into the supers and had reared a young swarm. If a queen-excluder was put on would it do to take part of the honey from below, or would it be better to add supers to make more room above?

2. I had two and three swarms in the air a day; Bokhara began to bloom, and then they filled the hive, but did not swarm. I wrapped up two supers and took them to a small town and called on a prominent attorney to sell honey. His wife was at a summer resort, and his boys did not like honey, but he concluded to take 4 pounds. We took the supers to a store to weigh the honey; when I saw the dark comb I felt as if 40 cents was a big price; but my next order was for \$10 worth; he was a farmer; it was for chunk honey. So I shall reverse and sell from below. Will additional supers prevent late swarms?

3. Bees are very busy now on goldenrod. I had some colonies in the supers last year, and they used up what honey there was above, and they would not go down for supplies, so the brood ought to be below; they had plenty, but seem to go up when in the cluster for winter, and when they got to the cover could go no farther. Should a queen-excluder

be put between the surplus and brood? What will make them build straight in the sections?

The help was threshing Bokhara seed to ship, so I thought I would send some beeswax, too, and came very nearly having a fire. I left the melting wax to get some corn to cook, and it boiled over, and burning lard is not equal to the blaze I had upon getting to the door. I seized a pitchfork and lifted the blazing can from the fire. A sun extractor would be far more safe. So you see what I don't know would fill a big book; but experience is a variety—some pleasant, and some otherwise.

After I got the honey and brood-combs out of those supers I put them into a tub of water and scraped them with a table-knife, sections and section-holders, and put on a duck coat and leather mittens, a bee-veil, straw hat (with a brim), took the smoker and went to put them back in the hives, as the bees are building four combs of honey under the alighting-board out-of-doors. I have tiered up three supers to the hive; I put them all on but the last one without a string; it was a big colony of Italians, and they were filling a super every two weeks; they covered me, so I started for the house, pulling off my bee-veil and leaving it on a bush as I went. I got to a tub of water and put my head right into it until I had drowned the bees, but my face, neck, ears and hands are twice the size they ought to be. One eye was closed one day. I bathed my face with cold water, and kept a folded towel, wet with cold water, on my head until the pain subsided; but it was awful for a short time. But I got the super on and the cover, too, later in the day. Now I think a large hive, and surplus room put on in the spring, and then leave the honey on until late in the fall, are better than small hives and to have to keep putting on supers.

MINNIE PRET.

Wabaunsee Co., Kans., August, 1903.

If you find that your customers prefer to have their honey in combs with dark cappings, it will be all right to leave the honey on till late. The honey itself will be a little richer and riper. In general, however, the demand is for honey with cappings snow-white, and to secure such honey it should be taken off as soon as entirely sealed.

It is an unusual thing for the bees to change their brood-nest into the upper story, but in the case you mention, it would be just as well to take the honey from the lower story as surplus, providing, of course, that you desire the honey in such form as bulk honey, and providing that the comb was not too old. Otherwise the best thing would be to put the queen below, and make her stay there by means of an excluder. The honey might be extracted from the brood-combs, at least enough to give the queen room to lay, or, if you prefer, you might oblige the bees to carry the honey above, aiding them by uncapping the honey in the brood-combs. In any case see that there is plenty of surplus room above.

"Will additional supers prevent late swarms?" No amount of super room will make them safe from swarming, but it will help; for being crowded is one of the things that makes them want to swarm.

"Ought one always to put a queen-excluder between the surplus and brood?" When working for section-honey it is not needed; but when working either for bulk honey or extracted, use one.

"What will make them build straight in the sections?" Use comb foundation in the sections, either as starters or full sheets.

An Ephesian Coin and Its Fable.

Various were the ways by which the site of certain cities were determined. For instance, the Palatine Hill became the original site of the Mistress of the World, because Romulus was so fortunate as to have seen a greater number of vultures than Remus had beheld. Cadmus, obeying the oracle, followed a cow, and on the plain where she stopped built the city of Thebes. Ilius also followed a dappled heifer, and on the "hill of Ate," where she layed down, he found his city of Ilium.

But it was once reserved to designate to man whereon to build his comb foundation, as it were. A tradition preserved by Philostratus, relates that when the Athenians led their colony to found the city of Ephesus, the Muses in the form of bees flew before them, directing the course of the fleet.

Such is the fable explanatory of the figure of a bee executed on the ancient coins of Ephesus. Such is the story, appropriate and beautiful, woven about the coin of that

Ionian city once called "the light of Asia." The Ephesian coin engraved in Humphrey's "Coin Collector's Manual"—representing the stag on the obverse, and the bee on the reverse—belongs, we are told, "to the finest period of the monetary art as practiced at Ephesus, probably soon after the invasion of Alexander, when the Greek cities of Asia Minor were relieved from the thralldom of Persia."

How one's fancy pictures forth the progress of that Aegean fleet! What a dainty and delicate theme for poet and painter! A theme, indeed, to be expressed in the softest and most exquisite of touches! And then, too, how the mind pictures the end of that bright voyage, and fain would believe that—

"The melodies of birds and bees,
The murmuring of summer seas,
And pattering rain and breathing dew,
And airs of evening,"—

voiced their welcome to that Athenian band, who were divinely led under the sweet guise of bees, by the daughters of Jupiter and Mnemosyne. KATE V. AUSTIN.

Wayne Co., Ind.

Hasty's Afterthoughts

The "Old Reliable" seen through New and Unreliable Glasses.
By E. E. HASTY, Sta. B Rural, Toledo, Ohio.

LATE CURING OF FOUL BROOD.

McEvoy's assertion that foul brood can be cured in October by simple substitution of the combs, appears on page 517. It helps a bad situation to the extent of giving an alternative method. He thinks the new combs given should be entirely full and capped, lest the bees store somewhere a patch of brought-along honey, and omit to use it out again.

He sometimes succeeds in increasing the total number of colonies at the same time that he is effecting a cure. But, say, I guess he ought not to encourage hopes in that direction on the part of the ordinary bee-keeper. O. b.-k. will damage his prospects of curing in his lust for increasing, if that flea is cultivated in his stocking.

LAMBOTTE'S FOUL BROOD IDEA HIT HARD.

Thos. Wm. Cowan's knock-down argument to Dr. Lambotte will bear repeating. *Bacillus Mesentericus* is everywhere. If it were the cause of foul brood we should hear of foul brood wherever bees are kept. The fact is, that there are many regions and countries which are clear of it. Page 519.

RIGHT DRESS FOR BEE-KEEPERS.

"Eyes right, right dress!" Somebody shout that same to some of the Brothers—considering the efforts the Sisters are making to arrive at right dress. Page 520.

BURNING OUT THE MOTH-WORM.

So "Illinois" set fire to one of his hives in his vehemence to be rid of the moth-worm. Ruefully admits that it was hard on the bees, but seems not to consider that dousing the establishment with lye would be a little hard, also. When I hear of such strong measurers I think it most probably a case which had got beyond all remedial measures. There is a time when the concern should be closed out. Shake the remnant of poor, old, queenless bees into an empty hive. Burn the rubbish in a fire, not in the hive, but near by. Put the salvage in tightly closed quarters—which must be looked over frequently, or it won't continue salvage long. Page 521.

HOME-MADE GRAPE-NUTS AND POSTUM.

So bread soaked in honey and toasted brown in the oven is Grape-Nuts; and crust soaked in honey and toasted extra brown is Postum. No danger of the former being worse than the Grape-Nuts I tried to eat lately. I found Grape-Nuts good when it first came out; so I guess it spoils quickly with age (insoluble, and too hard), and that the grocer gave me some that was too old. If we can make it ourselves we can have it perfectly fresh; and, perchance, that's about the only way we can have it fresh in many cases. As I am a regular health-food fiend, I should enjoy reading lots of

actual experiences on this line. Guess the average reader would tolerate some. Thanks to Mr. S. Trowbridge for his lead-off in the matter. Page 524.

THINKS ONE BACHELOR CAN'T COUNT.

Near relation to the boy who saw 500 cats in the backyard, is Brother Beverlin, if we read him correctly on page 526. His 115 swarms of bees at one time need counting by a man who didn't have his hands in the single-blessedness bread at the time. Thus, might we have a more cool, sober, and reliable census.

SPRING KILLING AND BALLING QUEENS.

A. G. Young is right to caution about getting queens balled and killed in early spring. (This last queer spring seems to have cap-sheaf for such work.) We have most of us practiced and recommended an early looking over of the frames and a cleaning out of the bottoms. I don't know now whether that practice is to be recommended or repro-bated. Page 526.

REPRESSING THE SWARMING IMPULSE.

Will foundation or comb do the more to repress the swarming impulse? Which, indeed? We know that abundance of clean worker-comb right at hand is a strong repressive. Can we quite say that we know that thing of foundation? I kind o' guess that for a few hours after being put in foundation is provocative—to become a repressive later on when worked out. Half enough of either one thrust in the heart of the colony—'spects we don't quite know that that is repressive at all. Page 531.

THE UNCERTAIN DOINGS OF BEES.

I've seen somewhere a vivid account of the interior of a hive when bees were fanning and roaring by night. Each bee full of nectar, and gently protruding a minute drop on the end of the ligula and then drawing it in again, and so on indefinitely. (May be it's romance I've picked up.) Suppose there could be, by novel-writer's device, a hungry bee in such a hive. Then, suppose the hungry bee should flourish her liquid and knock off one of those little protruding drops—and, in defiance of all new laws, appropriate it herself. That would be bad, Mr. Arthur C. Miller. Bees are so enterprising, so multiplex, so do-nothing-invariably, so sure to be breaking out in a new spot, that I, for one, decline to take the risk of saying they never do a thing when that thing is manifestly not impossible. Page 535.

Dr. Miller's Answers

Send Questions either to the office of the American Bee Journal, or to Dr. C. C. Miller, Marengo, Ill.

Reducing Number of Colonies.

On page 572, Sept., 1902, you tell "Pennsylvania" how to reduce the number of colonies in the fall. When you place the queenless colony on its own bottom-board over the "breeder," do you close up the entrance of the top hive? IOWA.

ANSWER.—No; the idea was to leave the entrance so the old bees could go back to their old place, leaving the younger bees in the new place. If, however, you wanted to have the older bees also used for strengthening, it would be all right to shut up the entrance, of course guarding against suffocation.

Slotted Sections—Bee-Keepers' Associations—Management for Extracted Honey.

1. Is there any advantage in the sections open four sides, or open top and bottom only, or only on bottom? If there is any, what is it?
2. Do you think a bee-keepers' association would help us any? and how?
3. What do you think of putting the extra story under the main brood-hive to prevent swarming when running for extracted honey?
4. Do you think they store any less honey? VIRGINIA.

ANSWERS.—1. I don't know whether sections open four sides are much used now, but at one time it was claimed that with the four sides open the bees would have more free communication, and would fill out the capping to the wood better. The few that I tried did not seem to have this advantage. A section open top and bottom is absolutely

necessary if you tier up. If you never use more than one super at a time the opening at the bottom would be enough.

2. There are many ways in which an association of bee-keepers is helpful, so many that there is no room to give them here. The National Association has helped to defend a number of bee-keepers who would otherwise have been obliged to give up bee-keeping, and it has helped to put down adulteration of honey. If it did nothing more, that is sufficient to make it the right thing for every bee-keeper in the land to send in his dollar to become a member.

3. Rightly managed, it may work very well.

4. No.

Section-Cases Under the Hive, Etc.

1. I notice in the Bee-Keepers' Review an extract from your book, "Forty Years Among the Bees," where you advocate placing the section-cases under the hive. If pollen, travel-stains or propolis does not bother too much this would be a good thing for northern Michigan bee-keepers, as the cool nights are not conducive to comb-building.

2. Which hive do you like best for comb-building, the Heddon or the Danzenbaker?

3. Have you ever tried the Boomhower, Doolittle, or the J. P. Moore strain of bees?

MICHIGAN.

ANSWERS.—1. There must be some misunderstanding. I think I never put supers of sections under the hive except to get the bees to empty the honey out of them, and that was not satisfactory, because the sections were badly dirtied. I should not think of putting sections under the hive to get the bees to store in them; most of all during cool nights.

2. Probably comb-building would proceed about the same in each.

3. I had some of the Doolittle golden, the most beautiful bees I ever saw.

Horse-Chestnut or Basswood?

Will it pay me to plant horse-chestnut trees for the benefit of my bees? or would you advise basswood?

MINNESOTA.

ANSWER.—Basswood, by all means. No other tree will give you so much honey. A horse-chestnut stands at my door, and when in bloom is visited by a good many bumble-bees, but by very few hive-bees.

Getting Bees Out of a Cupola.

A swarm of bees have been in a cupola of a school-house near here for four or five years. They are mostly black bees; they have an unlimited amount of room, so that they never swarm, and there must be a bushel of them. Some say there are 500 pounds of honey up there. I have tried chloroform and sulphur on them, but can not kill them. I have a small hole cut through the cupola, and can see all the combs. What would you do under the circumstances to get the honey? I dare not use fire or smoke up there. Is there not some chemical stronger, more penetrating and suffocating? If so, what would you recommend?

WISCONSIN.

ANSWER.—It would be a good deal easier to tell just what to do if one were right on the ground. Sulphur fumes ought to kill them, and chloroform should, at least, lay them temporarily, but it may be that you did not get the fumes directly on the bees for a sufficiently long time. Blown directly on the bees from a smoker, they ought to prove effectual. Bisulphide of carbon is stronger, but it would be just as hard to confine it to the bees in a large place. From what you say I understand that what you want is to kill the bees, and then there is no trouble about getting at the combs of honey. That being the case, put on a bee-veil and go right at the combs as if no bees were there; only have a smoker to drive the bees out of the way; cut off the combs, and brush the bees off. There ought not to be danger of fire from a smoker carefully handled.

Getting Rich in the Bee-Business.

Did you ever know any one to get rich in the bee-business? That is, if he made it his entire business, with nothing else to occupy his time?

CALIFORNIA.

ANSWER.—Adam Grimm made enough from bees alone to start a bank, and there are a few men living to-day who are making a good deal from their bees. But, as a rule, if a man is living for money alone, he will do well to go into some other than the bee-business.

Preparing Bees for Shipping—Moving to a New Location.

1. If I ship I will probably ship 90 hives; the hives are 9-frame telescopes, and we thought of putting an empty super on top, then a piece of thick, coarse cotton-cloth, the same as we use at home, then the cap, and nailing the cap on, and just as we are ready to load in the cars to put a piece of wire-screen cloth over the entrance. Will that be all right? Is that enough ventilation?

2. Will it be necessary to extract any honey? If so, how much?

3. How would you pack them? Would it be best to wad up coarse hay to pack between the hives, to act as a buffer to keep off the motion? But we expect to pack as solid as we can, anyway.

4. We thought of going somewhere in eastern Washington, per-

haps near Sunnyside, where the winters will not be severe, and it would be a good place to keep bees exclusively, for my four years in the army have told on me, and I can not stand cold winters. What part of the country do you think would be best?

MINNESOTA.

ANSWERS.—1. I'm not sure about the ventilation. If your hive-entrances are as large as mine, 12 by 2 inches, it would be all right. With an entrance as shallow as some, $\frac{3}{4}$ of an inch, it would not do so well. Something depends upon how close the cap fits. If that fits tight, so that no air can pass upward, then a small entrance will not be sufficient for ventilation. You might cut a hole in the side of each cap and cover it with wire-cloth.

2. If the combs are old and tough, or if they are well wired, there will be no need of extracting; otherwise it might be well to extract the lower half of combs heavily filled.

3. Hay packed in will be well, looking out that it does not interfere too much with the ventilation.

4. I have no knowledge of that country as to bee-pasturage.

Arranging Hives for Certain Space.

My apiary is situated west of my dwelling about 60 feet; it is 30 feet wide by 100 feet north and south, with evergreen trees west of the yard.

What would be the most convenient way to arrange the hives so as to put 100 colonies in that space? or is there room enough? I have them in rows north and south, facing the east, but had thought of changing them and facing the south. How close could they be arranged and do well, and have room to work back of the hives?

ILLINOIS.

ANSWER.—The best way I know of to give plenty of room between the hives and yet get them on a small space of ground, is to have them in groups of four, as given in "Forty Years Among the Bees," pages 95, 96. As I understand it, your ground is longest north and south; so let a row run north and south facing east, two hives close together side by side, then a space, and then another pair, and so on. Then another row, back to back, close up against this row, will face west. That will make a double row on each side of the yard, with perhaps 15 feet between the two double rows, and with more space than is needed between the hives to work at the side of each hive; for I hardly think you will want to work at the end of a hive.

Packing for Winter—Unpainted Hives.

1. When using outer cases and packing with some material for wintering, has sawdust been tried as packing?

2. If so, is it a success?

3. If not a good material, what are some of the objections?

4. Does a bee live long after it has stung and left the sting?

5. In answer to one of my former questions, you said you preferred unpainted hives, because you thought the bees better off in them, but you did not like the looks of them. Now, in what way do you think the bees better off in the unpainted hives?

6. If in unpainted hives they would produce more honey, ought not looks to be of secondary importance?

MICHIGAN.

ANSWERS.—1. Yes.

2. Not in all cases.

3. Some complaint of dampness.

4. I don't know just how long, but a considerable time. The injury does not seem alike in all cases. If my memory serves me, some one made the experiment of confining bees that had lost their stings with others uninjured, and there seemed no very great difference in the length of time the bees lived.

5. I don't know positively about the matter, but I think the hives have a better chance to dry out without the paint, and in a very limited experience I found that bees did not winter in a cellar so well in painted hives. Of course, it is possible that the paint was not at fault. Another objection is the cost, which might not be an objection if one were sure that one would not want to change hives within 25 years. But I found I made a mistake when I did not paint wooden covers.

6. That depends. An amateur with a few hives on a well-kept lawn should keep hives neatly painted. A large apiary kept for the money that's in it, is another matter.

Sour Honey—Keeping Honey—Swarming—Out-Door Wintering.

1. Herewith I send a sample of extracted honey which has lost its flavor; I have 150 pounds like it. It has been kept in a tank with a board over it. Do you think it soured because of insufficient ventilation?

2. I had a little comb honey in cases which had the same taste. Is it regular sour honey, or do the bees work in something to give it this taste?

3. How is the best way to keep comb and extracted honey? Can it be kept in a shop without fire ordinarily in this climate? This year has been cold and wet.

4. There is a locality, a few miles from here, where there are acres and acres of goldenrod, lots of heartsease, touch-me-not, and considerable buckwheat is raised; clover and basswood are nothing extra. Is there any practical way of keeping the bees from building up to swarm in June or July, and getting them up to their best about Aug.

5? If left to themselves I think they would be strongest just between clover and fall flow.

5. How do you think bees would winter out-of-doors with oil-cloth over the frames, sealed down at the sides, with a super of chaff on top? I use these all summer under the covers; they are very convenient. Would they do as well as a thin board sealed down, if covered with a chaff-packed super?

OHIO.

ANSWERS.—1. I should hardly say the honey had lost its flavor, for it has a pretty strong flavor, although not the very best. Judging from the sample, it was probably extracted when hardly ripe enough, the ventilation having perhaps nothing to do with it. Very likely you can improve it if you subject it to a pretty high temperature, not covering it closely. Try setting it on the reservoir of a cook-stove. But don't put it where it will be heated to more than 150 degrees. A mild heat applied for a number of days is the thing wanted.

2. What you probably object to is principally the flavor of the honey itself, perhaps accentuated by the lack of ripeness. There is very little souring in the case.

3. A hot, dry place—at least have the place dry, a place where salt will keep dry. It ought generally to be all right in Ohio, in a shop without fire.

4. It ought not to be a difficult matter to keep colonies weak till August. All that is needed is to start a sufficient number of nuclei, and then draw frames of brood to strengthen the nuclei and weaken the full colonies. But you had better try it on a small scale, for it is somewhat doubtful if you will like the results.

5. With a warm covering of chaff, you would likely find the oil-cloth all right, just about the same as a thin board.

Weight of Colony for Wintering.

How much should bees, hive and frames—an ordinary 8-frame dovetailed—weigh in order to be strong enough in bees and honey to winter on the summer stand?

NEBRASKA.

ANSWER.—For wintering in the cellar, I aim to have each hive with its contents, its cover, and its bottom-board, weigh as much as 50 pounds. For out-doors there should be 5 or 10 pounds more. If the combs are new, and if they do not contain much pollen, a smaller weight would do, but it is best to be on the safe side. A little too much honey in a hive for winter is just enough.

Queer Experiences with Swarming.

1. On June 14, colony No. 111 cast a prime swarm (it was hived in a new hive). June 21—the eighth day—just at evening I cut all queen-cells from the old colony, cut the caps from the most advanced cells, and let the queen run out into the hive. July 9—the 26th day after the first swarm—they swarmed again; the swarm was just an ordinary-sized second swarm, and wishing to examine the comb to ascertain if possible the cause of the unusual occurrence, I run the swarm into a box and overhauled the hive. I found a little capped brood in three combs, quite a little on one side of one of the frames, and a few scattering cells of brood in two other combs and seven queen-cells, one of which had the whole side torn out of it by the bees. The cap showed no evidence of having been opened. One, from which a queen had lately emerged, two with dead inmates all turned black, and three with good, lively queens in just ready to come out, and five or six patches of drone-brood capped, but quite young yet. When I cut the queen-cells I had shaved the heads off all the drones, no eggs or uncapped brood in the combs. Can you explain the cause of the unusual occurrence?

2. What is the best method for handling swarms from the colonies three or four weeks old? I know you do not think such colonies swarm again the same season, for a correspondent asked you the latter part of the winter how to prevent new colonies from swarming again in about four weeks, and you said, Oh, but they don't. But, Doctor,

they do with me, and with others around here, if there is any honey coming in, and I have tried every way I know to prevent it.

To illustrate: I got my first swarm June 13, and June 14 I had 10, and hived them in six hives June 15. Six swarms hived in four hives July 1; one of those colonies swarmed just 18 days after being hived; left the hive full of brood and honey, one super full, and the other well under way. The next day, July 2, two more of them swarmed, and up to last night (July 8) nine of those new colonies had cast swarms. Of course, it is awful, right in the height of the honey-flow, to have them break up that way, and something has to be done to keep them together. I am using now two methods—one is to kill the old queen, return the swarm, and then cut out the queen-cells the eighth day; the other way, I take four frames of brood from the hive and replace with four frames filled with foundation. There are objections to both methods—one is not always sure, the other you lose a valuable queen (for I think it takes a pretty good queen to fill an 8-frame hive with brood and eggs in 18 days); and it is not sure, either, if you happen to miss a cell.

Can you suggest any better plan?

MINNESOTA.

ANSWERS.—1. When a queen is unsatisfactory, one of the first things is to rear a successor. A good many years ago I had a queen reared by a very weak nucleus. She laid just one egg, and that was in a queen-cell, and then she disappeared. Your colony swarmed 18 days after you let the queen out of the cell. That would hardly allow time for queens to mature from her eggs, and the only guess I can make is that eggs had been left from the old queen undeveloped until after the time of your overhauling. Dzierzon says that bees sometimes keep eggs in that way.

2. If I understand you rightly, a swarm was sent out by a colony which 18 days previously had been hived as a swarm. This, although not a very common occurrence, has been known from time immemorial, such a swarm being called a virgin swarm. That was not the thing I disputed, but I claimed that a colony would not swarm if it had a queen reared in the hive during the current year; and even in that it seems I was mistaken. The best suggestion I can make is to get into the hive a young queen after the harvest opens.

Swarms—Introducing Queens.

1. How can that man in Arkansas get a swarm of bees in 14 days from a new colony when it takes 21 days to mature a bee?

2. I saw in the Bee Journal the way Dr. Miller introduced queens, by drowning them. I don't approve of that. My way is to place the queen in a cage, fill the hole in the cage with sugar, then put the cage between the top frames, and by the time the bees get her out they will be acquainted with the new queen.

I have had some experience with bees. Last spring I did not have any bees at all, but I placed some empty hives out and 2 swarms came to me; then I cut down 3 bee-trees and now I have 5 colonies in good condition.

IOWA.

ANSWER.—1. It is hard to understand how a swarm could be thrown off by a swarm hived only 14 days before, unless a frame of brood were given to the swarm, which is not an uncommon thing. It takes 21 days for a worker to mature from the time the egg is laid, but only 15 or 16 for a queen, and if a frame of brood were present and a queen were started from a grub, a young queen might emerge in 12 days or less.

2. Your way is the usual one, and is good. I don't know whether the drowning plan will always succeed, but if it does there is a saving of time over your plan.

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Bee-Keeping in Kentucky.

This has been a very favorable year for the busy bee. White clover has been in bloom longer this year, in this section at least, than was ever known before—nearly four months; whereas the usual length of time to bloom is less than two months. The reason for the splendid honey-flow the present season is due to the fine rains which have continued every few days. There is an abundance of golden-rod, from which the bees are gathering considerable honey; this honey has a fine flavor.

Kentucky is far behind some of the other States in the matter of honey-production. There is no organization here, each "goes it" alone, and such a "go"!

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It is not necessary to say that this state of affairs very seriously cripples the price of a nice article of honey.

I have 22 colonies of bees, and they did well this year.

There is much being said about the swarming problem; each writer has this or that to suggest as to the best means to solve this problem. For this locality, I find that to prevent swarming in any form is to be preferred. One strong colony that does not swarm will store 25 percent more honey than one of equal strength and opportunity which has swarmed or been "swarmed."

Bees will, in every case, attend to the wants of the brood-nest before they go elsewhere. To prepare this requires considerable time and labor, drawing out comb foundation in the one case, or building new comb from starters, or filling old ones with honey. While the brushed, shaken, or "shook" swarm is thus employed, the other being provided with a brood-nest "laden with stores and teeming with bees of all ages," is crowding the sections and storing their collections there.

To prevent swarming is, for me, easy of accomplishment. My colonies are made strong by stimulative feeding early in the spring. When they are about to swarm, an empty hive is prepared; if they swarm out, which they very often do, the queen is caught in a Miller cage, and a hasty examination is made of the brood-nest, there being, comparatively, no bees in the way. If a good cell is found, the comb is put in the prepared hive with another. Their places in the old hive are replaced by empty combs or full sheets of foundation. By this time the swarm returns to the old hive, the queen is released at the entrance, and all is well. Not one in ten will swarm after this operation. We not only prevent swarming, but we secure a rational increase in the apiary at the same time.

I do not desire to "forage" on your very valuable space, Mr. Editor, but beg to say a word about "bee-papers."

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he would know the bee and its habits. I attribute the slovenly manner in which bees are managed here to the lack of this knowledge. The American Bee Journal will call at my home as long as I can raise the price of its subscription. Its able editorials and articles contributed to it by some of the most able bee-experts of the age, and its general information pertaining to the bee-industry, make it one of the most useful, and at the same time interesting, publications of the day. If every man in Kentucky were to read the Journal, I believe her honey-production would, in a short, time be equal to that of many others of her sister States, for several of the honey-plants, especially white clover, flourish here as they do elsewhere. E. I. SMITH.

Warren Co., Ky., Sept. 4.

An Acknowledgement and Mulberries.

I gratefully acknowledge Mr. Hasty's suggestion, on page 602. His counsel is always on the side of reason, and I am ready to admit that I may have been a little premature in my conclusion. I fear that I am not cut out for a good missionary, but even now I would so amend my previous decision as to send a small plant of the white mulberry, as long as they last, to any one really interested in the subject.

The cuttings were, however, sent on full letter postage, and must have reached each applicant. Under the circumstances, our Uncle Sam generally does the "square thing."

DR. PEIRO.

Bees Did Well.

My bees did well this year. I got 1460 pounds of extracted honey from 18 colonies.

W. H. MOORE.

Smith Co., Tex., Sept. 19.

Had a Good Season.

We are having a good season. I have one colony that has stored 224 pounds of honey up to this date, and white clover is still in blossom, and the bees are working on it. This colony is in a 10-frame hive. N. H. VOGT.

Nemaha Co., Kans., Sept. 21.

Only a September Swarm.

Well, I was a sight to behold! My nearest friends were in a quandary whether I was Irish or Indian—and all due to that big swarm. No, it was so late we didn't expect them to swarm, did we? But they did, and the next morning, promptly at 9 a.m. There they were on that big cottonwood limb in my neighbor's yard—I was told of it after I left home, but couldn't leave the office to go catch a September swarm if it had been as big as a bushel basket—just what it looked.

But they waited for me, O yes, indeed; I energetically interviewed them a little while after 5 p.m. I first put an empty hive under that big limb for them to fall into, as it were; then I had that limb sawed off—and they did all the rest.

Now, I don't want to prevaricate, but if there wasn't a million bees all over me it certainly felt like it. After considerable investigation on their part, they found a hole in my veil just a little bit sooner than I did myself, and they weren't slow to get inside where I lived. Well, I'm not strong on English ex-

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pressions, or I might enlarge on my feelings at that moment, and a good many moments after that, but suffice it to say I felt something as I imagine a toad with erysipelas must feel—hot and swollen. In looks I must have seemed a "peach"—a nice, fat Crawford, face round, full, not a wrinkle. The good wife, who afterward took a lot of stingers out of my neck, ears and protruding brow, intimated that I looked like a human pin-cushion. But I was too abstracted to resent the allusion; what I most desired just then was to get those hot stickers out of my hide. And all this for a September swarm.

But the real joke is, I never got that swarm. No, sir; they "riz," and went back to that same tree and hugged its trunk just above where the limb was, and there they remained just five days to the very hour—to see if I'd come back after them. Not much! At 9 a.m. on Labor Day, they took their flight, with the best wishes that occurred to me, and went West for tall timber.

Did you ever hear of a swarm locating in the manner mentioned? Cool weather, too, and nothing to eat. Those fool things have likely gone into some hole, and, owing to the late, inclement season! won't get stores, and

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will die. But they'll die victorious, eh? Hang 'em!

But I say to their credit they did handsomely in putting in a big lot of honey in the brood-chamber, and a hundred pounds in the super, (mine is a double hive, you know). If they'd only had sense enough to stay and enjoy the fruit of their industry, I, too, would have been more contented.

Your punctuated uncle,
Cook Co., Ill. FRANK.

Partridge Pea.

I send a slip of a plant which grows here along hillsides and streams where there is plenty of yellow clay. I notice the bees work on it very hard in the fall. What is it?

FLOYD M. HEFFNER.

Webster Co., Iowa, Sept. 2.

[The enclosed plant is partridge pea, and belongs to the pulse family. Prof. Cook's Manual says it furnishes abundant nectar. The whole pulse family is a rather sweet one.—C. L. WALTON.]

Not a Pound of Honey.

The honey crop is a failure here. It has been a poor crop the past four years, but there is not a pound of honey to take off this fall. It has been too wet and cold since the first of August for the bees to work and store surplus honey.

W. E. MEAD.

Newaygo Co., Mich., Sept. 15.

The Hamilton Co., O., Association.

The Hamilton County Bee-keepers' Association held their annual meeting in the Grand Hotel, Cincinnati, Ohio, on Monday evening, Sept. 14. A large number of prominent bee-keepers in the county were present, also from adjoining counties in Indiana and Kentucky. The reports of the Secretary and Treasurer for the past year bespoke a flourishing condition of affairs.

Having settled the question of foul brood treatment by adopting the McEvoy method, this society has issued a pamphlet (free to

Long Tongues Valuable

South as well as North.

How Moore's strain of Italians roll in the honey down in Texas.

HUTTO, TEX., Nov. 19, 1902.

J. P. MOORE.—Dear Sir:—I wish to write you in regard to queens purchased of you. I could have written sooner, but I wanted to test them thoroughly and see if they had those remarkable qualities of a three-banded Italian bee. I must confess to you I am more surprised every day as I watch them. They simply "roll the honey in." It seems that they get honey where others are idle or trying to rob; and for gentleness of handling, I have never seen the like. Friend E. R. Root was right when he said your bees have the longest tongues; for they get honey where others fail. I will express my thanks for such queens. I am more than pleased. I will stock my out-apiaries next spring with your queens.

Yours truly,

HENRY SCHMIDT.

The above is pretty strong evidence that red clover is not the only plant which requires long-tongued bees to secure the greatest quantity of nectar.

Daughters of my 23-100 breeder, the prize-winner, and other choice breeders: Untested, 75 cents each; six, \$4.00; dozen, \$7.50. Select untested, \$1.00 each; six, \$5.00; dozen, \$9.00. Safe arrival and satisfaction guaranteed. Circular free. I am filling all orders by return mail, and shall probably be able to do so till the close of the season.

J. P. Moore, L. Box 1, Morgan, Ky.
31Atf Pendleton Co.

Please mention Bee Journal when writing

SWEET CLOVER

And Several Other Clover Seeds.

We have made arrangements so that we can furnish Seed of several of the Clovers by freight or express, at the following prices, cash with the order:

	5lb	10lb	25lb	50lb
Sweet Clover (white).....	\$.65	\$1.20	\$2.75	\$5.00
Sweet Clover (yellow)....	.90	1.70	4.80	7.50
Alsike Clover	1.00	1.80	4.25	8.00
White Clover	1.50	2.80	6.50	12.50
Alfalfa Clover	1.00	1.80	4.25	8.00

Prices subject to market changes.

Single pound 5 cents more than the 5-pound rate, and 10 cents extra for postage and sack.

Add 25 cents to your order, for cartage, if wanted by freight, or 10 cents per pound if wanted by mail.

GEORGE W. YORK & CO.

144 & 146 Erie Street, CHICAGO, ILL.



RUBE'S SURPRISE.

Well, I'll Be Bumped!

I don't see what I have been thinking of all summer. Here I could get as well sent to Griggs Bros. for my Supplies and saved all this freight I've been throwing away and got my goods cheaper, too. Don't see why I didn't send them a trial order sooner and find out what I was doin', long as they sell Root's Goods at their factory prices, just as they said.

A Word to the Wise is Sufficient.

GRIGGS BROS., - TOLEDO, OHIO.

28 cents Cash
paid for Beeswax.

low, upon its receipt, or 30 cents in trade. Impure wax not taken at any price.

Address as follows, very plainly,

GEORGE W. YORK & CO., 144 & 146 Erie St., Chicago, Ill.

Please mention the Bee Journal when writing advertisers.



This is a good time to send in your Beeswax. We are paying 28 cents a pound—CASH—for best yellow.

members) containing full instructions as to symptoms and cure.

It was resolved that the society bend its energies during the ensuing year towards the enactment of laws in favor of the bee-keeping industry in the State of Ohio.

The election of officers for the ensuing year was then proceeded with, and the following resulted:

President, Henry Shafer; vice-president, J. C. Frohlinger; treasurer, C. H. W. Weber; executive committee, Fred W. Muth, A. E. Painter, E. P. Rogers, E. H. Chidlaw, R. S. Curry, Charles Kuck, Wm. M. Lennan, W. R. Gould, G. Greene, E. H. Vaupel, Mrs. J. C. Frohlinger, and Miss Carrie Boehm. Wm. J. Gilliland, of Silverton, was re-elected secretary.

A motion to amend the by-laws to increase the executive committee from six to twelve was carried unanimously.

Bee-keeping being a source of pleasure to the gentler sex, it was resolved, on the urgent appeal of the secretary, to give them representation on the executive committee. Two were elected, whose names appear above.

E. A. Painter, a prominent attorney and bee-keeper, gave an interesting address on organization, after which a hearty vote of thanks was tendered the proprietor and manager of the Grand Hotel, for the accommodation afforded the bee-keepers' association, free of charge, during the past year.

W. J. GILLILAND, Sec.

Hamilton Co., Ohio.

CONVENTION NOTICES.

Wisconsin.—The annual meeting of the North-Eastern Wisconsin Bee-keepers' Association will be held in the Opera Hall, at Mishicot, Manitowoc Co., Wis., on Wednesday, Oct. 7, 1903. Mr. N. E. France, the General Manager of the National Bee-keepers' Association, will be present and address the meeting. It is expected that this will be the largest and best convention ever held by the bee-keepers of northern Wisconsin. Everyone interested in the production of honey should be present. An interesting program on many material subjects to each and every person interested in bees has been prepared, and such subjects will be discussed by the prominent and experienced bee-keepers, which will be followed by a free discussion by all in attendance who wish to participate. No one can help but profit by attending this convention. COMMITTEE.

Illinois.—The annual meeting of the Northern Illinois Bee-keepers' Association will be held in the Court House, in Rockford, Ill., Tuesday and Wednesday, Oct. 20 and 21, 1903. A good program is being prepared, and all interested in bees are invited to attend.

Cherry Valley, Ill. B. KENNEDY, Sec.

Utah.—The Utah Bee-keepers' Association will meet in the City and County Building in Salt Lake City, Oct. 5, commencing at 4:30 o'clock p.m. Among the subjects discussed will be the winter problem and the best method to promote the interest of the State and National Associations. E. S. LOVESY, Pres.

BOYS WE WANT WORKERS
Boys, Girls, old and young alike, make money working for us. We furnish capital to start you in business. Send us 10c stamps or silver for full instructions and a line of samples to work with. DRAPER PUBLISHING CO., Chicago, Ill.

"What Happened to Ted"

BY ISABELLE HORTON.

This is a true story of the poor and unfortunate in city life. Miss Horton, the author, is a deaconess whose experiences among the city poverty stricken are both interesting and sad. This particular short story—60 pages, 5x8 1/4 inches, bound in paper cover—gives somewhat of an insight into a little of the hard lot of the poor. Price, postpaid, only 10 cents (stamps or silver.) Address,

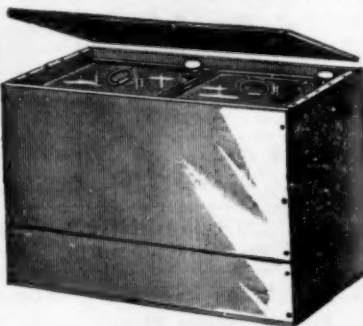
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BEST Extracted Honey For Sale

ALL IN 60-POUND TIN CANS.

Alfalfa Honey

This is the famous White Extracted Honey gathered in the great Alfalfa regions of the Central West. It is a splendid honey, and nearly everybody who cares to eat honey at all can't get enough of the Alfalfa extracted.



Basswood Honey

This is the well-known light-colored honey gathered from the rich, nectar-laden basswood blossoms. It has a stronger flavor than Alfalfa, and is preferred by those who like a distinct flavor in their honey.

Write for Quantity Prices by Freight, If Interested.

A sample of either, by mail, 10 cents, to pay for package and postage.

Order the Above Honey and then Sell It.

We would suggest that those bee-keepers who did not produce enough honey for their home demand this year, just order some of the above, and sell it. And others, who want to earn some money, can get this honey and work up a demand for it almost anywhere.

GEORGE W. YORK & CO., 144 & 146 E. Erie St., Chicago, Ill.

DITTMER'S FOUNDATION RETAIL AND WHOLESALE

This foundation is made by a process that produces the superior of any. It is the cleanest and purest. It has the brightest color and sweetest odor. It is the most transparent, because it has the thinnest base. It is tough and clear as crystal, and gives more sheets to the pound than any other make.

Working wax into Foundation for Cash a Specialty. Beeswax always wanted at highest price.

Catalog giving FULL LINE OF SUPPLIES with prices and samples, FREE on application. E. GRAINGER & Co., Toronto, Ont., Sole Agents for Canada.

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ROOTS GOODS AT ROOT'S PRICES

Everything used by bee-keepers. POWDER'S HONEY-JARS. Prompt service. Low Freight Rates. NEW CATALOG FREE.

WALTER S. POWDER. 512 MASS. AVE. INDIANAPOLIS, IND.

Italian Queens, Bees and Nuclei.



We have a strain of bees bred specially for honey-gathering and longevity, at the following prices:

One Untested Queen.....\$.60
One Tested Queen..... .80
One Select Tested Queen. 1.00
One Breeder Queen..... 1.50
One Comb Nucleus (no Queen)..... 1.00

These prices are for the remainder of the season.

Queen sent by return mail. Safe arrival guaranteed. For price on Doz. lots send for Catalog. J. L. STRONG, 16Atf 204 E. Logan St., CLARINDA, IOWA

REMARKABLE

The Universal Satisfaction our QUEENS do give...

STERLING, GA., June 29, 1903.
I was showing my father yesterday how my bees, which I bought from you, were out-working everything in my apiary. Send me 4 Buckeye Red Clover and 2 Muth Strain Golden Italians. I will order more after next extracting. THOS. H. KINCADE.

Buckeye Strain Red Clover Queens. They roll in honey, while the ordinary starve. Muth Strain Golden Italians—NONE SUPERIOR. ∴ Carniolans—NONE BETTER.

Untested, 75c each; 6 for.....\$ 4.00 | Tested, \$1.50 each; 6 for.....\$ 7.25
Select Untested, \$1.00 each; 6 for..... 5.00 | Select Tested, \$2.50 each; 6 for..... 12.00
Best money can buy, \$3.50 each.

Send for Catalog of BEE-SUPPLIES; complete line at manufacturer's prices.

The Fred W. Muth Co.,

Front and Walnut,

CINCINNATI, OHIO.

HONEY AND BEESWAX

MARKET QUOTATIONS

CHICAGO, Sept. 18.—Sales are not frequent enough to keep receipts cleaned up. They are made on a basis of 13@14c for comb of the best grades. Extracted, white, 6½@7c for clover and basswood, and 6@7c for other white honeys; amber, 5½@6½c; according to flavor and package. Beeswax, 30c. R. A. BURNETT & Co.

KANSAS CITY, Aug. 25.—Receipts of comb honey more liberal; demand improving. We quote fancy white comb, 24 section case, \$3.25; No. 1, white amber comb, 24-section case, \$3.00; No. 2, white amber comb, 24-section case, \$2.75; Extracted, white, per lb. 6½c; amber, 5½@6c. Beeswax, 25@30c. C. C. CLEMONS & Co.

ALBANY, N.Y., Sept. 19.—Honey market firm on light receipts so far and good demand. We quote: Fancy white, 16c; No. 1, white, 15c; No. 2, 14c; buckwheat, 13@14c. Extracted, good demand just now for Jewish holidays, for candied honey, at 6@6½c for dark; white clover, 7@7½c; mixed amber, 6½@7c. Beeswax, 30c.

H. R. WRIGHT.

CINCINNATI, Aug. 6.—The supply about equals the demand for extracted honey. We are selling amber extracted in barrels from 5½@6½c, according to quality. White clover, barrels and cans, 7@8½c, respectively. Comb honey, fancy, in no drip shipping cases, 16@16½ cents. Beeswax, 30c. THE FRED W. MUTH CO.

NEW YORK, Sept. 8.—New crop comb honey is beginning to arrive more freely, and the demand is good for all grades. We quote fancy white at from 14@15c. No. 1 at 13c, amber at from 11@12c; no buckwheat on the market as yet.

Extracted is plentiful, and in fair demand at 7c for the white, 6@6½c for the light amber, 5@5½c for dark. Southern in barrels at from 55@65c per gallon, according to quality. Beeswax is declining, and nominal at from 28@29c. HILDRETH & SEGELKEN.

CINCINNATI, Sept. 18.—The extracted honey market has weakened a little as white clover is offered quite plentiful; prices of sales I made ruled as follows: Amber, in barrels, 5@5½c; water-white alfalfa, 6@6½c; fancy white clover, 6½@7½c. Comb honey, fancy white-white, 14@15c. No sales for lower grades. Beeswax, 28c. C. H. W. WEBER.

SAN FRANCISCO, Sept. 2.—White comb honey, 13@14c; amber, 9@11c. Extracted, white, 5½@6c; light amber, 5@5½c; amber, 4½@5c; dark amber, 4@4½c. Beeswax, good to choice, light, 27½@29c; dark, 25@26c.

Most of the comb on market is of small lots, and while being very steadily held, fails to move as readily or to as good advantage as would straight carload lots of uniform and high grade. Extracted is in high request, with offerings of only moderate volume, and market firm at prevailing values.

WANTED! FANCY COMB HONEY

In no-drip shipping-cases. Also Amber Extracted in barrels or cans. Quote your best price delivered Cincinnati. The Fred W. Muth Co. 32Atf Front and Walnut, CINCINNATI, OHIO.

WANTED—Comb Honey in quantity lots. We are perhaps the only dealers in this article owning as much as 150,000 pounds at one time. Please state quantity, quality and price asked for your offerings. Thos. C. Stanley & Son, 24Atf MANZANOLA, COLO., or FAIRFIELD, ILL.

WANTED—Extracted Honey.

Mail sample and state lowest price delivered Cincinnati. Will buy FANCY WHITE COMB HONEY, any quantity, but must be put up in no-drip shipping-cases.

O. H. W. WEBER, 2146-48 Central Ave., CINCINNATI, OHIO. 24Atf Please mention the Bee Journal.

WANTED!

TO BUY—White Clover Comb and Extracted HONEY—also Beeswax. Spot cash. Address at once, C. M. SCOTT & CO. 33Atf 1004 E. WASH. ST., INDIANAPOLIS, IND.

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The Best Bee-Goods in the World....

are no better than those we make, and the chances are that they are not so good. If you buy of us you will not be disappointed. We are undersold by no one. Send for new catalog and price-list and free copy of THE AMERICAN BEE-KEEPER; in its thirteenth year; 50 cents a year; especially for beginners.

—THE—
W. T. Falconer Mfg. Co.,
JAMESTOWN, N. Y.

W. M. GERRISH, Epping, N.H., carries a full line of our goods at catalog prices. Order of him and save the freight.

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Queen-Clipping Device Free!



The MONETTE Queen-Clipping Device is a fine thing for use in catching and clipping Queens' wings. It is used by many beekeepers. Full printed directions sent with each one. We mail it for 25 cents; or will send it FREE as a premium for sending us One New subscriber to the Bee Journal for a year at \$1.00; or for \$1.10 we will mail the Bee Journal one year and the Clipping Device. Address,

GEORGE W. YORK & CO.,
144 & 146 E. Erie St., - CHICAGO, ILL.

Hives, Sections, Foundation,
etc. We can save you money. Send list of goods wanted and let us quote you prices. ROOT'S GOODS ONLY. Send for Catalog.

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SHEEP MONEY IS GOOD MONEY
and easy to make if you work for us. We will start you in business and furnish the capital. Work light and easy. Send 10 cents for full line of samples and particulars.
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For Sale
10 to 100 Colonies of Yellow Italian Bees in Dovetail hives. Bees and hives in first-class condition.
JOHN DIVEKY.
38A4t 346 S. River St., AURORA, ILL.

If you want the Bee-Book

That covers the whole Apicultural Field more completely than any other published, send \$1.20 to

Prof. A. J. Cook, Claremont, Cal.,

FOR HIS

"Bee-Keeper's Guide."

Liberal Discounts to the Trade.

Catnip Seed Free!

We have some of the seed of that famous honey-producing plant—Catnip. It should be scattered in all waste-places for the bees. Price, postpaid, 15 cents per ounce; or 2 ounces mailed FREE to a regular subscriber for sending us one NEW subscriber to the Bee Journal for one year, with \$1.00; or for \$1.20 we will send the Bee Journal one year and 2 ounces of Catnip seed to any one.

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Year

Dadant's Foundation

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Year

We guarantee Satisfaction. What more can anybody do? BEAUTY, No LOSS. PATENT WEED-PROCESS SHEETING.

Why does it sell so well? Because it has always given better satisfaction than any other. Because in 25 years there have not been any complaints, but thousands of compliments.

Send name for our Catalog, Samples of Foundation and Veil Material. We sell the best Veils, cotton or silk.

Bee-Keepers' Supplies OF ALL KINDS *****

Very fine pure-bred BARRED PLYMOUTH ROCK Chickens and Eggs for sale at very low prices.

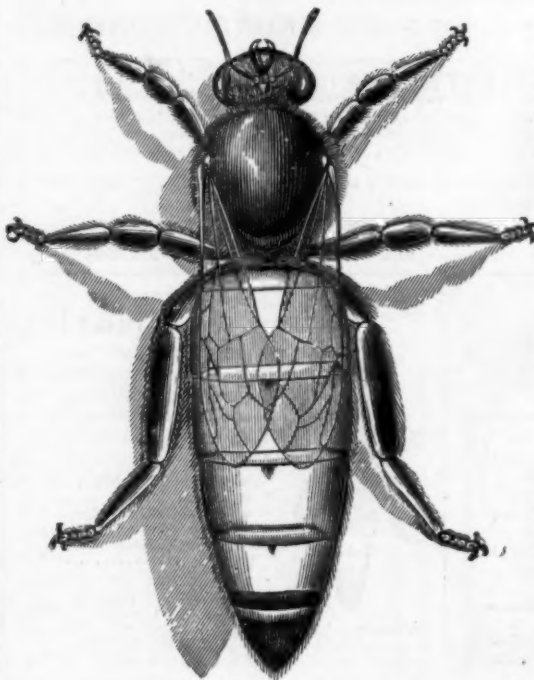
Langstroth on the Honey-Bee—Revised,
The classic in Bee-Culture—Price, \$1.20, by mail.

BEESWAX WANTED
at all times.

DADANT & SON,
Hamilton, Hancock Co., Ill

Please mention Bee Journal when writing

RED CLOVER HONEY-QUEENS.



SPRING BLUFF, WIS., July 19, 1903.

THE A. I. ROOT CO., Medina, Ohio.
Dear Sirs:—I thought I would write you a few lines in regard to the Red Clover Queen I got from you. They haven't swarmed yet this summer, but I have taken 48 sections from them and there is 24 more all ready to come off.

Just think, 72 nice sections of as nice honey as ever was made, and only July 19th. It seems as though they will surely fill 48 more.

I don't know whether their tongues are any longer than any of the others, or whether they gathered it from Red Clover, but surely such bees are worth money.

I use the 8-frame Jumbo frame.
C. E. KELLOGG.

C. E. KELLOGG, Spring Bluff, Wis.
Dear Sir—We have yours of July 19th and would be glad to have you advise us by return mail with reference to the capping of the honey. Some articles say the capping from these bees is not white, and we would be glad to have you advise us how your honey is in this respect, and oblige,
Yours truly,
THE A. I. ROOT CO.

SPRING BLUFF, WIS., July 31, 1903.

THE A. I. ROOT CO., Medina, Ohio.
Dear Sirs—Yours of July 24th at hand to-day. In regard to your question in reference to the cappings of the honey from these bees I will say that it is simply perfect, beautiful snow-white and every box perfect. 56 one-pound sections now. I am quite sure they will fill two more supers, which will bring the number up to 144. I would like very much to have you see a few of those sections, and I will be glad to send you a few.

Now, I haven't told you ALL their good qualities yet. I am sure they are by far the most gentle bees to handle I have. I could take off the sections without smoke or veil without getting stung.

There are a few traits about them that seem to me are quite remarkable aside from their honey-gathering; they don't seem to want to swarm.

I will write you again in a few weeks and let you know if they fill the 144 sections, which I am sure they will.

Respectfully,
C. E. KELLOGG.

AGAIN READY FOR PROMPT DELIVERY.

We were snowed under with orders for a few weeks, but here we are again with good Queens and prompt service.

Red Clover and Honey Queens.

	Each.	Six.	
Untested	\$1.00	\$5.70	Breeding
Tested	2.00	11.40	Select Breeding
Select Tested	3.00	17.10	Extra Select Breeding

With any of the last three we include one frame of bees and brood to insure safe arrival, for which we make no charge. These must be sent by express. Queen circular free.

THE A. I. ROOT CO., Medina, Ohio.